1/12

```
Lc743    M   N   F   N   V   S   L   M   E   K   L   K   W   K   I   K   C   I   E   N      20
RM8con   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
         1  ---------+---------+---------+---------+---------+---------+      60
Lc743    ATGAATTTCAACGTTAGTTTGATGGAGAAATTAAAATGGAAGATTAAATGCATTGAAAAT
RM8A     .....Lc743/5'.............................................
RM8B     ...........................................................
RM8C     ...........................................................
RM8con   ...........................................................


Lc743    K   F   L   N   Y   R   L   T   T   N   E   T   V   V   A   E   T   E   Y   G      40
RM8con   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
         61 ---------+---------+---------+---------+---------+---------+     120
Lc743    AAGTTTTTAAACTATCGTTTAACTACCAATGAAACGGTGGTAGCTGAAACTGAATATGGC
RM8A     ...........................................................
RM8B     ...........................................................
RM8C     ...........................................................
RM8con   ...........................................................


Lc743    K   V   K   G   V   K   R   L   T   V   Y   D   D   S   Y   Y   S   F   E   G      60
RM8con   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
         121 ---------+---------+---------+---------+---------+---------+    180
Lc743    AAAGTGAAAGGCGTTAAACGTTTAACTGTGTACGATGATTCCTACTACAGTTTTGAGGGT
RM8A     ...........................................................
RM8B     ...........................................................
RM8C     ...........................................................
RM8con   ...........................................................


Lc743    I   P   Y   A   Q   P   P   V   G   E   L   R   F   K   A   P   Q   R   P   T      80
RM8con   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
         181 ---------+---------+---------+---------+---------+---------+    240
Lc743    ATACCGTACGCCCAACCGCCAGTGGGTGAGCTGAGATTTAAAGCACCCCAGCGACCAACA
RM8A     ...........................................................
RM8B     ...........................................................
RM8C     ...........................................................
RM8con   ...........................................................


Lc743    P   W   D   G   V   R   D   C   C   N   H   K   D   K   S   V   Q   V   D   F     100
RM8con   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
         241 ---------+---------+---------+---------+---------+---------+    300
Lc743    CCCTGGGATGGTGTGCGTGATTGTTGCAATCATAAAGATAAGTCAGTGCAAGTTGATTTT
RM8A     ...........................................................
RM8B     .................C.........................................
RM8C     ...........................................................
RM8con   ...........................................................
```

FIGURE 1

```
Lc743    I  T  G  K  V  C  G  S  E  D  C  L  Y  L  S  V  Y  T  N  N  120
RM8con   .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     301 ---------+---------+---------+---------+---------+---------+ 360
Lc743    ATAACGGGCAAAGTGTGTGGCTCAGAGGATTGTCTATACCTAAGTGTCTATACGAATAAT
RM8A     ............................................................
RM8B     ............................................................
RM8C     ............................................................
RM8con   ............................................................


Lc743    L  N  P  E  T  K  R  P  V  L  V  Y  I  H  G  G  G  F  I  I  140
RM8con   .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     361 ---------+---------+---------+---------+---------+---------+ 420
Lc743    CTAAATCCCGAAACTAAACGTCCCGTTTTAGTATACATACATGGTGGTGGTTTTATTATC
RM8A     ............................................................
RM8B     ............................................................
RM8C     ............................................................
RM8con   ............................................................


Lc743    G  E  N  H  R  D  M  Y  G  P  D  Y  F  I  K  K  D  V  V  L  160
RM8con   .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     421 ---------+---------+---------+---------+---------+---------+ 480
Lc743    GGTGAAAATCATCGTGATATGTATGGTCCTGATTATTTCATTAAAAAGGATGTGGTGTTG
RM8A     ........................................-...................
RM8B     ............................................................
RM8C     ............................................................
RM8con   ............................................................


Lc743    I  N  I  Q  Y  R  L  G  A  L  G  F  L  S  L  N  S  E  D  L  180
RM8con   .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     481 ---------+---------+---------+---------+---------+---------+ 540
Lc743    ATTAACATACAATATCGTTTGGGAGCTCTAGGTTTTCTAAGTTTAAATTCAGAAGACCTT
RM8A     ............................................................
RM8B     ............................................................
RM8C     ........................................................
RM8con   ............................................................


Lc743    N  V  P  G  N  A  G  L  K  D  Q  V  M  A  L  R  W  I  K  N  200
RM8con   .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     541 ---------+---------+---------+---------+---------+---------+ 600
Lc743    AATGTGCCCGGTAATGCCGGCCTTAAAGATCAAGTCATGGCCTTGCGTTGGATTAAAAAT
RM8A     ............................................................
RM8B     ............................................................
RM8C     ....................................................A.......
RM8con   ............................................................
```

Figure 1 continued

```
Lc743      N  C  A  N  F  G  G  N  P  D  N  I  T  V  F  G  E  S  A  G   220
RM8con     .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     601 ---------+---------+---------+---------+---------+---------+ 660
Lc743    AATTGCGCCAACTTTGGTGGCAATCCCGATAATATTACAGTCTTTGGTGAAAGTGCCGGT
RM8A     ............................................................
RM8B     ............................................................
RM8C     ............................................................
RM8con   ............................................................


Lc743      A  A  S  T  H  Y  M  M  L  T  E  Q  T  R  G  L  F  H  R  G   240
RM8con     .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     661 ---------+---------+---------+---------+---------+---------+ 720
Lc743    GCTGCCTCTACCCACTACATGATGTTAACCGAACAAACTCGCGGTCTTTTCCATCGTGGT
RM8A     ............................................................
RM8B     ............................................................
RM8C     ............................................................
RM8con   ............................................................


Lc743      I  L  M  S  G  N  A  I  C  P  W  A  N  T  Q  C  Q  H  R  A   260
RM8con     .  .  .  .  .  .  .  .  .  .  L  .  .  .  .  .  .  .  .  .
     721 ---------+---------+---------+---------+---------+---------+ 780
Lc743    ATACTAATGTCGGGTAATGCTATTTGTCCATGGGCTAATACCCAATGTCAACATCGTGCC
RM8A     .............................T..............................
RM8B     .............................T..............................
RM8C     .............................T..............................
RM8con   .............................T..............................


Lc743      F  T  L  A  K  L  A  G  Y  K  G  E  D  N  D  K  D  V  L  E   280
RM8con     .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     781 ---------+---------+---------+---------+---------+---------+ 840
Lc743    TTCACCTTAGCCAAATTGGCCGGCTATAAGGGTGAGGATAATGATAAGGATGTTTTGGAA
RM8A     ............................................................
RM8B     ............................................................
RM8C     ...........................................A................
RM8con   ............................................................


Lc743      F  L  M  K  A  K  P  Q  D  L  I  K  L  E  E  K  V  L  T  L   300
RM8con     .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     841 ---------+---------+---------+---------+---------+---------+ 900
Lc743    TTTCTTATGAAAGCCAAGCCACAGGATTTAATAAAACTTGAGGAAAAAGTTTTAACTCTA
RM8A     ............................................................
RM8B     ............................................................
RM8C     ...............................G............................
RM8con   ............................................................
```

Figure 1 continued

```
.Lc743   E   E   R   T   N   K   V   M   F   P   F   G   P   T   V   E   P   Y   Q   T   320
RM8con   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
     901 ----------+----------+----------+----------+----------+----------+ 960
Lc743    GAAGAGCGTACAAATAAGGTCATGTTTCCTTTTGGTCCCACTGTTGAGCCATATCAGACC
RM8A     ............................................................
RM8B     ............................................................
RM8C     ............................................................
RM8con   ............................................................


Lc743    A   D   C   V   L   P   K   H   P   R   E   M   V   K   T   A   W   G   N   S   340
RM8con   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
     961 ----------+----------+----------+----------+----------+----------+1020
Lc743    GCTGATTGTGTCTTACCCAAACATCCTCGGGAAATGGTTAAAACTGCTTGGGGTAATTCG
RM8A     ............................................................
RM8B     ............................................................
RM8C     ............................................................
RM8con   ............................................................


Lc743    I   P   T   M   M   G   N   T   S   Y   E   G   L   F   F   T   S   I   L   K   360
RM8con   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
    1021 ----------+----------+----------+----------+----------+----------+1080
Lc743    ATACCCACTATGATGGGTAACACTTCATATGAGGGTCTATTTTTCACTTCAATTCTTAAG
RM8A     ............................................................
RM8B     ............................................................
RM8C     ............................................................
RM8con   ............................................................


Lc743    Q   M   P   M   L   V   K   E   L   E   T   C   V   N   F   V   P   S   E   L   380
RM8con   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
    1081 ----------+----------+----------+----------+----------+----------+1140
Lc743    CAAATGCCTATGCTTGTTAAGGAATTGGAAACTTGTGTCAATTTTGTGCCAAGTGAATTG
RM8A     ............................................................
RM8B     ............................................................
RM8C     ..........................................................,.
RM8con   ............................................................


Lc743    A   D   A   E   R   T   A   P   E   T   L   E   M   G   A   K   I   K   K   A   400
RM8con   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .   .
    1141 ----------+----------+----------+----------+----------+----------+1200
Lc743    GCTGATGCTGAACGCACCGCCCCAGAGACCTTGGAAATGGGTGCTAAAATTAAAAAGGCT
RM8A     .......T....................................................
RM8B     ............................................................
RM8C     ............................................................
RM8con   ............................................................
```

Figure 1 continued

```
Lc743      H  V  T  G  E  T  P  T  A  D  N  F  M  D  L  C  S  H  I  Y  420
RM8con     .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     1201 ----------+----------+----------+----------+----------+----------+1260
Lc743      CATGTTACAGGAGAAACACCAACAGCTGATAATTTTATGGATCTTTGCTCTCACATCTAT
RM8A       ............................................................
RM8B       ............................................................
RM8C       ............................................................
RM8con     ............................................................


Lc743      F  W  F  P  M  H  R  L  L  Q  L  R  F  N  H  T  S  G  T  P  440
RM8con     .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     1261 ----------+----------+----------+----------+----------+----------+1320
Lc743      TTCTGGTTCCCCATGCATCGTTTGTTGCAATTACGTTTCAATCACACCTCCGGTACACCC
RM8A       ............................................................
RM8B       ............................................................
RM8C       ............................................................
RM8con     ............................................................


Lc743      V  Y  L  Y  R  F  D  F  D  S  E  D  L  I  N  P  Y  R  I  M  460
RM8con     .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     1321 ----------+----------+----------+----------+----------+----------+1380
Lc743      GTCTACTTGTATCGCTTCGACTTTGATTCGGAAGATCTTATTAATCCCTATCGTATTATG
RM8A       ........................C.....................C.............
RM8B       ........................C.....................C.............
RM8C       ........................C.....................C.............
RM8con     ........................C.....................C.............


Lc743      R  S  G  R  G  V  K  G  V  S  H  A  D  E  L  T  Y  F  F  W  480
RM8con     .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     1381 ----------+----------+----------+----------+----------+----------+1440
Lc743      CGTAGTGGACGTGGTGTTAAGGGTGTTAGTCATGCTGATGAATTAACCTATTTCTTCTGG
RM8A       ............................................................
RM8B       ............................................................
RM8C       ............................................................
RM8con     ............................................................


Lc743      N  Q  L  A  K  R  M  P  K  E  S  R  E  Y  K  T  I  E  R  M  500
RM8con     .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
     1441 ----------+----------+----------+----------+----------+----------+1500
Lc743      AATCAATTGGCCAAACGTATGCCTAAAGAATCGCGTGAATACAAAACAATTGAACGTATG
RM8A       ............................................................
RM8B       ............................................................
RM8C       ............................................................
RM8con     ............................................................
```

Figure 1 continued

```
  Lc743    T   G   I   W   I   Q   F   A   T   T   G   N   P   Y   S   N   E   I   E   G   520
  RM8con   .       .       .       .       .       .   .       .   .       .       .       .       .       .
      1501 ---------+---------+---------+---------+---------+---------+1560
  Lc743    ACTGGTATATGGATACAATTTGCCACCACTGGTAATCCTTATAGCAATGAAATTGAAGGT
  RM8A     ............................................................
  RM8B     ............................................................
  RM8C     ............................................................
  RM8con   ............................................................


  Lc743    M   E   N   V   S   W   D   P   I   K   K   S   D   E   V   Y   K   C   L   N   540
  RM8con   .       .       .       .       .       .       .       .       .       .       .       .       .       .
      1561 ---------+---------+---------+---------+---------+---------+1620
  Lc743    ATGGAAAATGTTTCCTGGGATCCAATTAAGAAATCCGACGAAGTATACAAGTGTTTGAAT
  RM8A     ...............................................T............
  RM8B     ...............................................T............
  RM8C     ...............................................T............
  RM8con   ...............................................T............


  Lc743    I   S   D   E   L   K   M   I   D   V   P   E   M   D   K   I   K   Q   W   E   560
  RM8con   .       .       .       .       .       .       .       .       .       .       .       .       .       .
      1621 ---------+---------+---------+---------+---------+---------+1680
  Lc743    ATTAGTGACGAATTGAAAATGATTGATGTGCCTGAAATGGATAAGATTAAACAATGGGAA
  RM8A     .........T.................................................G
  RM8B     .........T.................................................G
  RM8C     .........T.................................................G
  RM8con   .........T.................................................G


  Lc743    S   M   F   E   K   H   R   D   L   F   *   570
  RM8con   .       .       .       .       .       .       .       .
      1681 ---------+---------+---------+--- 1713
  Lc743    TCGATGTTTGAAAAACATAGAGATTTATTTTAG
  RM8A     ................Lc743/3'.........
  RM8B     .................................
  RM8C     .................................
  RM8con   .................................
```

Figure 1 continued

Figure 2.

```
MdαE7    1  MTFLKQFIFRLKLCVKCMVNKYTNYRLSTNETQIIDTEYGQIKGVKRMTV  50
            |.|    ::•||: :||: ||: ||||•||||  : :||||•:|||||:||
LcαE7    1  MNFNVSLMEKLKWKIKCIENKFLNYRLTTNETVVAETEYGKVKGVKRLTV  50

        51  YDDSYYSFESIPYAKPPVGELRFKAPQRPVPWEGVRDCCGPANRSVQTDF  100
            |||||||||:||||•||||||||||||||•||:||||||••  ::|||•||
        51  YDDSYYSFEGIPYAQPPVGELRFKAPQRPTPWDGVRDCCNHKDKSVQVDF  100

       101  ISGKPTGSEDCLYLNVYTNDLNPDKRRPVMVFIHGGDFIFGEANRNWFGP  150
            |•||••|||||||||•||||:|||:•:|||:|:||||:||:||•:|: :||
       101  ITGKVCGSEDCLYLSVYTNNLNPETKRPVLVYIHGGGFIIGENHRDMYGP  150

       151  DYFMKKPVVLVTVQYRLGVLGFLSLKSENLNVPGNAGLKDQVMALRWVKS  200
            |||:||•|||:••:|||||•||||||•||:|||||||||||||||||:|•
       151  DYFIKKDVVLINIQYRLGALGFLSLNSEDLNVPGNAGLKDQVMALRWIKN  200

       201  NIAIFGGDVDNITVFGESAGGASTHYMMITEQTRGLFHRGIMMSGNSMCS  250
            |•| |||:•|||||||||||:|||||||:|||||||||||:|•||••|•
       201  NCANFGGNPDNITVFGESAGAASTHYMMLTEQTRGLFHRGILMSGNAICP  250
                ↓
       251  WASTECQSRALTMAKRVGYKGEDNEKDILEFLMKANPYDLIKEEPQVLTP  300
            ||•|:|| ||:|:|| •||||||:||:||||||||•| |||| |••|||
       251  WANTQCQHRAFTLAKLAGYKGEDNDKDVLEFLMKAKPQDLIKLEEKVLTL  300

       301  ERMQNKVMFPFGPTVEPYQTADCVVPKIREMVKSAWGNSIPTLIGNTSY  350
            | • |||||||||||||||||||||:||• ||||||•|||||||::|||||
       301  EERTNKVMFPFGPTVEPYQTADCVLPKHPREMVKTAWGNSIPTMMGNTSY  350

       351  EGLLSKSVAKQYPEVVKELESCVNYVPWELADSERSAPETLERAAIVKKA  400
            |||: •|: || | :|||||•|||:||•||||•||•||||||•:| :|||
       351  EGLFFTSILKQMPMLVKELETCVNFVPSELADAERTAPETLEMGAKIKKA  400

       401  HVDGETPTLDNFMELCSYFYFLFPMHRFLQLRFNHTAGTPIYLYRFDFDS  450
            ||•|||| ||||:||| •:||:|||||:|||||||| •|||:||||||||||
       401  HVTGETPTADNFMDLCSHIYFWFPMHRLLQLRFNHTSGTPVYLYRFDFDS  450

       451  EEIINPYRIMRFGRGVKGVSHADELTYLFWNILSKRLPKESREYKTIERM  500
            |::||||||||| ||||||||||||||||:||| |•||:|||||||||||||
       451  EDLINPYRIMRSGRGVKGVSHADELTYFFWNQLAKRMPKESREYKTIERM  500

       501  VGIWTEFATTGKPYSNDIAGMENLTWDPIKKSDDVYKCLNIGDELKVMDL  550
            •|||•:|||||•||||:|•||||:•||||||:•|||||||:||||||::|:
       501  TGIWIQFATTGNPYSNEIEGMENVSWDPIKKSDEVYKCLNISDELKMIDV  550

       551  PEMDKIKQGASIFDKKKELF  570
            |||||||| •|:|:|•::||
       551  PEMDKIKQWESMFEKHRDLF  570
```

Figure 3.

```
     ATGACTTTTCTGAAGCAATTCATATTTCGCCTGAAACTATGCTTTAAATGCATGGTCAAT
  1  ---------+---------+---------+---------+---------+---------+ 60
     TACTGAAAAGACTTCGTTAAGTATAAAGCGGACTTTGATACGAAATTTACGTACCAGTTA

      M  T  F  L  K  Q  F  I  F  R  L  K  L  C  F  K  C  M  V  N  -

     AAATACACAAACTACCGTCTGAGTACAAATGAAACCCAAATAATCGATACTGAATATGGA
 61  ---------+---------+---------+---------+---------+---------+ 120
     TTTATGTGTTTGATGGCAGACTCATGTTTACTTTGGGTTTATTAGCTATGACTTATACCT

      K  Y  T  N  Y  R  L  S  T  N  E  T  Q  I  I  D  T  E  Y  G  -

     CAAATTAAGGGTGTTAAGCGAATGACCGTCTACGATGATTCTTACTACAGTTTCGAGAGT
121  ---------+---------+---------+---------+---------+---------+ 180
     GTTTAATTCCCACAATTCGCTTACTGGCAGATGCTACTAAGAATGATGTCAAAGCTCTCA

      Q  I  K  G  V  K  R  M  T  V  Y  D  D  S  Y  Y  S  F  E  S  -

     ATACCCTATGCTAAGCCTCCAGTGGGTGAGTTGAGATTCAAGGCACCCCAGCGGCCTGTA
181  ---------+---------+---------+---------+---------+---------+ 240
     TATGGGATACGATTCGGAGGTCACCCACTCAACTCTAAGTTCCGTGGGGTCGCCGGACAT

      I  P  Y  A  K  P  P  V  G  E  L  R  F  K  A  P  Q  R  P  V  -

     CCATGGGAGGGTGTACGTGATTGCTGTGGGCCAGCCAACAGATCGGTACAGACAGATTTC
241  ---------+---------+---------+---------+---------+---------+ 300
     GGTACCCTCCCACATGCACTAACGACACCCGGTCGGTTGTCTAGCCATGTCTGTCTAAAG

      P  W  E  G  V  R  D  C  C  G  P  A  N  R  S  V  Q  T  D  F  -

     ATAAGTGGCAAACCCACAGGTTCGGAGGATTGTCTATACCTGAATGTGTATACCAATGAC
301  ---------+---------+---------+---------+---------+---------+ 360
     TATTCACCGTTTGGGTGTCCAAGCCTCCTAACAGATATGGACTTACACATATGGTTACTG

      I  S  G  K  P  T  G  S  E  D  C  L  Y  L  N  V  Y  T  N  D  -

     TTGAACCCAGACAAAAGGCGTCCTGTTATGGTTTTCATCCATGGCGGAGATTTTATTTTC
361  ---------+---------+---------+---------+---------+---------+ 420
     AACTTGGGTCTGTTTTCCGCAGGACAATACCAAAAGTAGGTACCGCCTCTAAAATAAAAG

      L  N  P  D  K  R  R  P  V  M  V  F  I  H  G  G  D  F  I  F  -

     GGCGAAGCAAATCGTAACTGGTTTGGTCCCGACTACTTTATGAAGAAACCCGTGGTCTTG
421  ---------+---------+---------+---------+---------+---------+ 480
     CCGCTTCGTTTAGCATTGACCAAACCAGGGCTGATGAAATACTTCTTTGGGCACCAGAAC

      G  E  A  N  R  N  W  F  G  P  D  Y  F  M  K  K  P  V  V  L  -
```

```
     GTAACCGTGCAATATCGTTTGGGTGTGTTGGGTTTCCTTAGCCTGAAATCGGAAAATCTC
481  ---------+---------+---------+---------+---------+---------+ 540
     CATTGGCACGTTATAGCAAACCCACACAACCCAAAGGAATCGGACTTTAGCCTTTTAGAG

      V  T  V  Q  Y  R  L  G  V  L  G  F  L  S  L  K  S  E  N  L   -

     AATGTCCCCGGCAACGCTGGCCTCAAGGATCAAGTAATGGCCTTGAGATGGGTCAAGAGT
541  ---------+---------+---------+---------+---------+---------+ 600
     TTACAGGGGCCGTTGCGACCGGAGTTCCTAGTTCATTACCGGAACTCTACCCAGTTCTCA

      N  V  P  G  N  A  G  L  K  D  Q  V  M  A  L  R  W  V  K  S   -

     AATATTGCCATTTTCGGTGGCGATGTAGACAATATTACCGTCTTCGGCGAAAGTGCTGGT
601  ---------+---------+---------+---------+---------+---------+ 660
     TTATAACGGTAAAAGCCACCGCTACATCTGTTATAATGGCAGAAGCCGCTTTCACGACCA

      N  I  A  I  F  G  G  D  V  D  N  I  T  V  F  G  E  S  A  G   -

     GGGGCCTCAACCCATTACATGATGATAACCGAACAGACCCGTGGTTTATTCCATCGTGGT
661  ---------+---------+---------+---------+---------+---------+ 720
     CCCCGGAGTTGGGTAATGTACTACTATTGGCTTGTCTGGGCACCAAATAAGGTAGCACCA

      G  A  S  T  H  Y  M  M  I  T  E  Q  T  R  G  L  F  H  R  G   -

     ATCATGATGTCCGGTAATTCCATGTGCTCATGGGCCTCTACAGAATGCCAAAGTCGTGCG
721  ---------+---------+---------+---------+---------+---------+ 780
     TAGTACTACAGGCCATTAAGGTACACGAGTACCCGGAGATGTCTTACGGTTTCAGCACGC

       I  M  M  S  G  N  S  M  C  S  W  A  S  T  E  C  Q  S  R  A  -

     CTCACCATGGCCAAACGTGTTGGCTATAAGGGAGAGGACAATGAAAAAGATATCCTGGAA
781  ---------+---------+---------+---------+---------+---------+ 840
     GAGTGGTACCGGTTTGCACAACCGATATTCCCTCTCCTGTTACTTTTTCTATAGGACCTT

      L  T  M  A  K  R  V  G  Y  K  G  E  D  N  E  K  D  I  L  E   -

     TTCCTAATGAAAGCCAATCCCTATGATTTGATCAAAGAGGAGCCACAAGTTTTGACACCC
841  ---------+---------+---------+---------+---------+---------+ 900
     AAGGATTACTTTCGGTTAGGGATACTAAACTAGTTTCTCCTCGGTGTTCAAAACTGTGGG

      F  L  M  K  A  N  P  Y  D  L  I  K  E  E  P  Q  V  L  T  P   -

     GAAAGAATGCAAAATAAGGTCATGTTTCCTTTTGGACCCACTGTAGAACCATACCAGACA
901  ---------+---------+---------+---------+---------+---------+ 960
     CTTTCTTACGTTTTATTCCAGTACAAAGGAAAACCTGGGTGACATCTTGGTATGGTCTGT

      E  R  M  Q  N  K  V  M  F  P  F  G  P  T  V  E  P  Y  Q  T   -

     GCCGACTGTGTGGTACCCAAACCAATCAGAGAAATGGTGAAGAGCGCCTGGGGAAATTCG
961  ---------+---------+---------+---------+---------+---------+ 1020
     CGGCTGACACACCATGGGTTTGGTTAGTCTCTTTACCACTTCTCGCGGACCCCTTTAAGC

      A  D  C  V  V  P  K  P  I  R  E  M  V  K  S  A  W  G  N  S   -
```

Figure 3 continued

```
       ATACCCACATTGATAGGCAATACCTCCTACGAAGGTTTGCTTTCCAAATCAATTGCCAAA
  1021 ---------+---------+---------+---------+---------+---------+ 1080
       TATGGGTGTAACTATCCGTTATGGAGGATGCTTCCAAACGAAAGGTTTAGTTAACGGTTT

        I   P   T   L   I   G   N   T   S   Y   E   G   L   L   S   K   S   I   A   K   -

       CAATATCCGGAGGTTGTAAAAGAGTTGGAATCCTGTGTGAATTATGTGCCTTGGGAGTTG
  1081 ---------+---------+---------+---------+---------+---------+ 1140
       GTTATAGGCCTCCAACATTTTCTCAACCTTAGGACACACTTAATACACGGAACCCTCAAC

        Q   Y   P   E   V   V   K   E   L   E   S   C   V   N   Y   V   P   W   E   L   -

       GCTGACAGTGAACGCAGTGCCCCGGAAACCCTGGAGAGGGCTGCCATTGTGAAAAAGGCC
  1141 ---------+---------+---------+---------+---------+---------+ 1200
       CGACTGTCACTTGCGTCACGGGGCCTTTGGGACCTCTCCCGACGGTAACACTTTTTCCGG

        A   D   S   E   R   S   A   P   E   T   L   E   R   A   A   I   V   K   K   A   -

       CATGTGGATGGGGAAACACCTACTCTGGATAATTTTATGGAGCTTTGCTCCTATTTCTAT
  1201 ---------+---------+---------+---------+---------+---------+ 1260
       GTACACCTACCCCTTTGTGGATGAGACCTATTAAAATACCTCGAAACGAGGATAAAGATA

        H   V   D   G   E   T   P   T   L   D   N   F   M   E   L   C   S   Y   F   Y   -

       TTCCTCTTCCCCATGCATCGCTTCCTACAATTGCGCTTCAACCACACAGCTGGCACTCCC
  1261 ---------+---------+---------+---------+---------+---------+ 1320
       AAGGAGAAGGGGTACGTAGCGAAGGATGTTAACGCGAAGTTGGTGTGTCGACCGTGAGGG

        F   L   F   P   M   H   R   F   L   Q   L   R   F   N   H   T   A   G   T   P   -

       ATTTATTTGTATCGTTTCGATTTCGATTCCGAAGAAATTATTAACCCCTATCGTATTATG
  1321 ---------+---------+---------+---------+---------+---------+ 1380
       TAAATAAACATAGCAAAGCTAAAGCTAAGGCTTCTTTAATAATTGGGGATAGCATAATAC

        I   Y   L   Y   R   F   D   F   D   S   E   E   I   I   N   P   Y   R   I   M   -

       CGTTTTGGCCGTGGCGTTAAAGGTGTAAGCCATGCCGATGAGCTAACCTATCTCTTCTGG
  1381 ---------+---------+---------+---------+---------+---------+ 1440
       GCAAAACCGGCACCGCAATTTCCACATTCGGTACGGCTACTCGATTGGATAGAGAAGACC

        R   F   G   R   G   V   K   G   V   S   H   A   D   E   L   T   Y   L   F   W   -

       AACATTTTGTCGAAACGCCTGCCAAAGGAAAGCCGCGAATACAAAACCATTGAACGCATG
  1441 ---------+---------+---------+---------+---------+---------+ 1500
       TTGTAAAACAGCTTTGCGGACGGTTTCCTTTCGGCGCTTATGTTTTGGTAACTTGCGTAC

        N   I   L   S   K   R   L   P   K   E   S   R   E   Y   K   T   I   E   R   M   -

       GTTGGCATTTGGACGGAATTCGCCACCACCGGCAAACCATACAGCAATGATATAGCCGGC
  1501 ---------+---------+---------+---------+---------+---------+ 1560
       CAACCGTAAACCTGCCTTAAGCGGTGGTGGCCGTTTGGTATGTCGTTACTATATCGGCCG

        V   G   I   W   T   E   F   A   T   T   G   K   P   Y   S   N   D   I   A   G   -
```

Figure 3 continued

SUBSTITUTE SHEET (RULE 26)

```
      ATGGAAAACCTCACCTGGGATCCCATAAAAAAATCCGATGATGTCTATAAATGTTTAAAT
1561  ---------+---------+---------+---------+---------+---------+ 1620
      TACCTTTTGGAGTGGACCCTAGGGTATTTTTTTAGGCTACTACAGATATTTACAAATTTA

       M   E   N   L   T   W   D   P   I   K   K   S   D   D   V   Y   K   C   L   N   -

      ATCGGCGATGAATTGAAAGTTATGGATTTGCCAGAAATGGATAAAATTAAACAATGGGCA
1621  ---------+---------+---------+---------+---------+---------+ 1680
      TAGCCGCTACTTAACTTTCAATACCTAAACGGTCTTTACCTATTTTAATTTGTTACCCGT

       I   G   D   E   L   K   V   M   D   L   P   E   M   D   K   I   K   Q   W   A   -

      AGTATATTCGATAAAAAGAAGGAATTGTTT
1681  ---------+---------+---------+ 1710
      TCATATAAGCTATTTTTCTTCCTTAACAAA

       S   I   F   D   K   K   K   E   L   F
```

Figure 3 continued

Figure 4..

```
MdαE7 97 QTDFISGKPTGSEDCLYLNVYTNDLNPDKKRPVMVFIHGGGFIFGEANRN 146
            |.|||.||..||||||||.||||:||||:.||||:|:||||||||:||.:|:
LcαE7 97 QVDFITGKVCGSEDCLYLSVYTNNLNPETKRPVLVYIHGGGFIIGENHRD 146

       147 WYGPDYFMKKPVVLVTVQYRLGVLGFLSLKSENLNVPGNAGLKDQVMALR 196
            ||||||:||.|||:.:|||||.||||||.||:||||||||||||||||
       147 MYGPDYFIKKDVVLINIQYRLGALGFLSLNSEDLNVPGNAGLKDQVMALR 196

       197 WFKSNIAIFGGDVDNITVFGESAGGASTHYMMITEQTRGLFHRGIMMSGN 246
            |:|.|.| |||:.|||||||||||:||||||:|||||||||||:||||
       197 WIKNNCANFGGNPDNITVFGESAGAASTHYMMLTEQTRGLFHRGILMSGN 246

       247 SMCSSASTECQSRALTMAKRVGYKGEENEKDILEFLMKANPYDLIKEEPQ 296
            .:|. |.|:|| ||:|:|| .|||||:|:||:||||||.| |||| |..
       247 AICPLANTQCQHRAFTLAKLAGYKGEDNDKDVLEFLMKAKPQDLIKLEEK 296

       297 VLTPERM 303
            ||| | .
       297 VLTLEER 303
```